

AMENDMENTS TO THE CLAIMS

LISTING OF CLAIMS:

Claim 1 (Currently amended). A process for the biological production of vitamin B₆ which comprises cultivating a host cell transformed or transfected by an isolated DNA or by a vector or plasmid comprising the isolated DNA under conditions ~~the condition~~ conducive ~~conductive~~ to the production of vitamin B₆, and recovering vitamin B₆ from the culture, wherein the host cell is selected from Sinorhizobium or Escherichia and wherein the isolated DNA comprises a nucleotide sequence encoding ~~that encodes~~ PdxR, which is a flavin adenine dinucleotide-dependent D-erythronate 4-phosphate dehydrogenase, selected from the group consisting of:

- (a) a DNA sequence identified by SEQ ID NO:1 or the complementary strand thereof;
- (b) a DNA sequence which hybridizes under stringent hybridization and stringent washing conditions ~~standard conditions~~ to the DNA sequence complementary to the DNA sequence defined in (a) ~~or a fragment thereof~~, and encodes a polypeptide having the activity of flavin adenine dinucleotide-dependent D-erythronate 4-phosphate dehydrogenase;
- (c) a DNA sequence encoding ~~which codes for~~ a polypeptide having the amino acid sequence encoded by the DNA sequence of (a) or (b);
- (d) a DNA sequence which is ~~identical to the extent of~~ at least 80% identical to a DNA encoding ~~which codes for~~ a polypeptide which comprises the amino acid sequence of SEQ ID NO: 2, and encodes a polypeptide having the activity of flavin adenine dinucleotide-dependent D-erythronate 4-phosphate dehydrogenase; and

(e) a DNA sequence encoding which ~~codes~~ for a polypeptide which comprises an amino acid sequence which is ~~identical to the extent of~~ at least 80% identical to the amino acid sequence of SEQ ID NO: 2, and encodes a polypeptide having the activity of flavin adenine dinucleotide-dependent D-erythronate 4-phosphate dehydrogenase.

Claim 2 (Currently amended). A process for the biological production of vitamin B₆ which comprises introducing the isolated DNA as claimed in any one of (a) to (e) in claim 1 into an appropriate host cell selected from Sinorhizobium melioti or Escherichia coli, cultivating the obtained host cell under conditions the condition conducive conductive to the production of vitamin B₆, and recovering vitamin B₆ from the culture.

Claim 3 (Currently amended). The process according to claim 1 or 2, wherein said host cell belongs to the genus *Sinorhizobium*.